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*CircleAreaMain.j...   CalcuationsImpl...   Calculations.java

Problems   Javadoc   Declaration   Console

```java
20    * Run this program to find area of circle.
 8  package com.programs;
 9
10  import java.util.Scanner;
11
12  public class CircleAreaMain {
13
14      public static void main(String[] args) {
15
16          System.out.println("Enter the radius
17
18          Circle refCircle = new Circle();
19          refCircle.setRadius(15);
20
21          Scanner in = new Scanner(System.in);
22          float radius = 0;
23
24          try {
25              radius = in.nextFloat();
26              Circle circle = new Circle();
27              Circle anotherRef = circle;
28              circle.setRadius((float)radius);
29              Calculations calculations = new CalcuationsImpl();
30              calculations.calculateArea(circle);
31              System.out.println("Area of a circle with radius " + radius + " is :"
32                      + Math.round(calculations.calculateArea(circle)));
33
34              int isRefCircleBigger = refCircle.compareTo(circle);
35              if (isRefCircleBigger > 0) {
36                  System.out
37                          .println("Ref circle with radius 15 is bigger than user created circle with radius :" + radius);
38              }
39              if (isRefCircleBigger < 0) {
40                  System.out.println(
41                          "Ref circle with radius 15 is smaller than user created circle with radius :" + radius);
42              }
43
44              if (isRefCircleBigger == 0) {
45                  System.out.println(
46                          "Ref circle with radius 15 is same size as the user created circle with radius :" + radius);
47              }
48
49              System.out.println("To String of user created circle" + circle.toString());
```

Console output:

```
<terminated> CircleAreaMain [Java Application] C:\Program Files\Java\jdk-17.0.4.1\bin\javaw.exe (Sep 6, 2022, 6:46:01 PM – 6:46:08 PM) [
Enter the radius  of a circle:
10
Area of a circle with radius 10.0 is :314
Ref circle with radius 15 is bigger than user created circle with radius :10.0
To String of user created circleCircle [radius=10.0]
To String of ref circleCircle [radius=15.0]
Equals operations result between refCircle and user created circle :false
Equals operations result between anotherRef and user created circle :true
```